

seventh and eighth-graders, its student body is representative of California's diverse culture. But despite the various backgrounds represented, each student is expected to contribute to a learning environment which demands high expectation. As a result, over 500 students make the honor roll each semester.

The teachers and staff of this school are committed to giving "whatever it takes" to meet the needs of their students. This goal frequently requires involving the parents and community in school activities.

This combination of high expectations for students, committed teachers and staff, and parental involvement has made Carl H. Lorbeer Middle School one of America's Blue Ribbon Schools.

TRIBUTE TO MARY L. CARROLL

HON. DONALD M. PAYNE

OF NEW JERSEY

IN THE HOUSE OF REPRESENTATIVES

Thursday, June 15, 2000

Mr. PAYNE. Mr. Speaker, I would like my colleagues here in the U.S. House of Representatives to join me in honoring a special person, Ms. Mary L. Carroll, on the occasion of her retirement from Bell Atlantic after 32½ years of loyal service.

Ms. Carroll began working for the Bell Telephone Company in New Jersey on December 9, 1967, as a telephone operator. In 1972, she was promoted to Service Assistant, a position she held until her retirement on September 17, 1999. Ms. Carroll became active in her union, the Communication Workers of America, where she held a number of key positions. She served as group leader for 9 years, secretary-treasurer for 6 years, and as president for three consecutive terms. She continues to hold that position for Local 1006. Ms. Carroll has earned an outstanding reputation for fairness, leadership, and concern for others.

Family has always been important to Ms. Carroll, who was the oldest of 12 children born to her parents John and Annie Mae of Henderson, NC. She takes pride in her own children, Raymond, Valencia, and Ray and her grandchildren Jovan, Andrea, Ray Sean, and Little Raymond. In addition, she treasures her extended family at Bell Atlantic and the Communications Workers of America.

On June 16, 2000, family and friends will gather in New Jersey for a retirement celebration in honor of Ms. Carroll. Mr. Speaker, I know my colleagues join me in congratulating Ms. Carroll on a job well done and in wishing her all the best as she begins a new phase of her life.

THE BACA RANCH

HON. TOM UDALL

OF NEW MEXICO

IN THE HOUSE OF REPRESENTATIVES

Thursday, June 15, 2000

Mr. UDALL of New Mexico. Mr. Speaker, today I would like to bring to your attention the beautiful Baca Ranch which lies in my third congressional district of New Mexico. I have worked very closely with the entire New Mexico congressional delegation: Senator PETE V. DOMENICI, Senator JEFF BINGAMAN, HEATHER

WILSON, the gentlelady from the 1st District, and Representative JOE SKEEN of the 2nd District, to ensure that the Baca Ranch can become part of our citizens' patrimony. It is my hope that very soon this chamber will favorably consider and approve the acquisition of the Baca Ranch that all of us in the delegation have worked so intently for. I believe that we must preserve this natural treasure for the future generations in New Mexico and throughout our country.

New Mexico Magazine is the oldest state magazine in the United States. Every month this periodical publishes articles and items of interest that touch persons who are interested in or feel affection for the Land of Enchantment. The June 2000 issue contains a beautiful layout that includes a description and photographs of the Valles Caldera by Douglas Preston and photographer Christine Preston. The editors of New Mexico Magazine have granted me the honor of inserting the text of this article into the CONGRESSIONAL RECORD so that everyone can share in the wonder that is the Baca Ranch.

[From The New Mexico Magazine, June 2000]

BUYING THE BACA

(By Douglas Preston)

N.M. 4, the main road through the Jemez Mountains, climbs through steep canyons and ponderosa forests for many miles. As it reaches the heart of the mountains, a spectacular vista breaks out: a high meadow of incredible vastness, called the Valle Grande, ribboned with streams and ringed by 11,000-foot peaks. Those who stop to admire the view can't help but notice the barbed wire fence and "No Trespassing" signs that indicate this enticing valley and the mountains beyond lie on private property.

This is the Baca Location No. 1, a 100,000-acre ranch embedded within the Santa Fe National Forest. For more than half a century the federal government has tried to acquire this extraordinary piece of land. Last fall the Forest Service and the family that owns the property, the Dunigans, reached a tentative agreement to transfer the property to the American people for \$101 million. All that remains is for Congress to provide the funds. If the deal goes through it will be one of the largest and most important land acquisitions in the American West in decades.

The Baca Location No. 1—also known as the Baca Land and Cattle Company—encompasses one of the legendary geological landscapes in America, known as the Valles Caldera. The Valle Grande and the mountains and valleys beyond are the remnants of a gigantic crater, called a caldera, formed by an eruption more than a million years ago. Much of what we know about volcanic caldera formation comes from decades of exploration of the Valles Caldera. It is one of the world's most intensively studied geological landscapes.

An observer standing on the site of Santa Fe 1.2 million years ago, looking westward, would have witnessed the birth of the Valles Caldera in a cataclysm of breathtaking violence. Before the eruption, our observer would have seen a grouping of interlocking volcanic peaks not unlike the Jemez Mountains today, shaped by earlier volcanic activity. (Polvadera and Chicoma Peaks in the Jemez today are remnants of these earlier volcanoes.) Contrary to popular belief, there was never a mountain anywhere near as high as Mt. Everest at the site. The highest peaks in this earlier range were probably about 12,000 feet—the same as the Jemez today.

The big blowup started out small—some faint earth tremors, the distant sound of

thunder and a cauliflower of ash rising into the azure sky. Because the prevailing winds were blowing out of the southeast carrying the ash toward Utah, our Santa Fe observer would have had an excellent view. Over the days and weeks, a nascent volcano gradually built up through fresh eruptions, each bigger than the last. And then the climax came.

One or more furious explosions hurled clouds of ash 100,000 feet into the atmosphere, where they formed a gigantic mushroom cloud. The sounds of the explosions were so thunderous that they bounced off the upper atmosphere and echoed around the curve of the Earth, to be heard thousands of miles away. Like a firestorm, the eruption sucked air inward, generating gale-force winds of 75 to 100 miles an hour. The cloud created its own weather system. As it rose in the sky, lightning ripped through it, and it began dropping great columns of rain and sooty hail.

As the magma emptied out from below the Earth's surface, the underground roof of the magma chamber began to collapse. The volcano slumped in, cracking in concentric circles and triggering earthquakes. A gigantic depression formed. The pumice and ash, instead of being shot upward out of a single pipe, now began squirting out of every crack and crevice in the roof of the magma chamber. The eruption became horizontal instead of vertical. Huge avalanches of ash, glowing orange at more than a thousand degrees, raced down the mountainsides at speeds greater than 150 miles an hour, flattening thousands of trees in their path. (The cylindrical holes left by these trees would be found much later by geologists.)

When these superheated avalanches hit the Rio Grande, they vaporized the river with a fantastic roar. The ash probably dammed the river, causing it to back up into a lake. When the water finally burst through, devastating flash floods swept downstream. The spreading clouds of ash created darkness so profound that at midday you could not see the hand in front of your face. When the dust finally settled, our observer in Santa Fe would have seen the outline of the Jemez Mountains much as they appear today, minus Redondo Peak. That mountain eerily rose up later, a blister in the earth pushed up by rising magma that never broke out to make a new volcano. The collapse of the magma chamber left a giant crater, or caldera, which soon filled with water to become a crater lake. Over the years, there were flurries of smaller eruptions, and gradually the lake bottom filled with sediments and lava flows to make a gentle floor. The lake eventually broke out and drained. Grass covered the fertile bottomlands, creating the Valle Grande and other vast grass valleys on the ranch, such as the Valle San Antonio and the Valle Toledo. Although the last eruption took place 60,000 years ago, the area remains volcanically active. Hot springs and sulfur vents scattered across the Baca attest to the presence of magma not far from the surface, seismic data indicates a large body of magma sits about 6 to 10 miles down. The Jemez will very likely erupt again.

The Valles Caldera, contrary to popular myth, is not the largest caldera in the world, or even in New Mexico. There is a larger caldera in the Mogollon Mountains, dating back 25 million years, and an even larger one in the San Juan Mountains. The Jemez eruption, for all its power, was only fair to middling in size. Geologists estimate the eruption spewed out some 300 cubic kilometers of pumice ash. This was big compared to Mount St. Helens (half a cubic kilometer) and Krakatoa (10 cubic kilometers), but smaller than the Mogollon eruption (1,000 cubic kilometers) or the San Juan (5,000 cubic kilometers.) Among geologists, however, the